**SP21 Project: Analysis of First-Person A.I Training Methods**

Capstone Weekly Status Report

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<https://github.com/rebeljedi999/TheCTeam>

**REPORT WEEK 2 (MAR 1 – MAR 7)**

1. Weekly Accomplishments
   1. Kyle H. and Paul researched ways to implement a neural network into unreal engine, and settled on a way that utilizes Tensorflow.
   2. Paul began the implementation of Tensorflow in the Unreal Engine.
   3. Kyle M. and Somayyeh did research on potential reward algorithms we could use and how to implement them into the Unreal Engine.
2. Problems/Issues
   1. Paul had issues with installing dependencies for the project, but resolved the issue by reinstalling python.
3. Next week’s planned work
   1. Kyle M. and Somayyah will implement the reward methods into the unreal engine.
   2. Kyle H. and Paul will implement the neural network with Tensorflow.
4. Time log

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| --- | --- |
| Last Name | Hours Worked |
| Hinton | 3.5 |
| Kamyab | 3 |
| McQuillen | 1 |
| Teref | 0 |
| Wells | 4 |
| Team Total | 19.5 |

**REPORT WEEK 1 (FEB 22 - FEB 28)**

1. Weekly Accomplishments
   1. All team members installed, ran, and familiarized themselves with the Unreal Engine environment.
   2. Kyle H., Kyle M., Paul, and Yohannes began tutorials on reinforcement learning in Unreal Engine.
   3. Kyle M. researched genetic algorithms and their possible implementation in Unreal.
2. Problems/Issues
   1. Somayyeh had initial problems with C++ programming, but after reviewing her notes she completed the basic tutorials for the Unreal Engine.
   2. Kyle M. is still trying to figure out the best way to implement the genetic algorithm.
   3. Yohannes struggled with some of the concepts in the reinforcement learning tutorial, but after further research he understands the concepts that were presented.
3. Next week’s planned work
   1. Kyle M., Somayyah, and Yohannes will research methods to reward NN and document potential algorithms.
   2. Kyle H. and Paul will begin a basic implementation of Reinforcement Learning algorithm and NN to get first generation.
4. Time log

|  |  |
| --- | --- |
| Last Name | Hours Worked |
| Hinton | 4.5 |
| Kamyab | 2 |
| McQuillen | 4 |
| Teref | 5 |
| Wells | 4 |
| Team Total | 19.5 |